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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,429	08/22/2003	Robert L. Billmers	3043.FDI	9142

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EXAMINER	
TRAN LIEN, THUY	
ART UNIT	PAPER NUMBER
1794	

MAIL DATE	DELIVERY MODE
09/14/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/646,429	BILLMERS ET AL.	
	Examiner	Art Unit	
	Lien T. Tran	1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 July 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8 and 10-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8 and 10-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *9/3/09*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Claims 1,10,11 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Bell et al. and Mizoguchi et al.

Bell et al disclose a fried composition comprising a food portion and a batter containing starch that has been cross-linked with succinic anhydride. The batter adheres directly on the food portion. The food portion includes chicken, fish, fruit etc.. (see col. 2 lines 20-25, col. 3 line 14, col. 7 lines 15-20, col. 8 lines 13-14).

Bell et al disclose coating food composition with starch succinate; thus, it is inherent the food will have the claimed reduction of fat content as claimed. Bell et al are silent as to whether the starch succinate is an ester. Mizoguchi et al in a process of making processed starch disclose that examples of esterifying agents useful for preparing cross-linked starch esters are acetic anhydride, succinic anhydride etc.. Bell et al disclose cross-linking with succinic anhydride; thus the starch in Bell et al is a starch succinate ester as evidence by Mizoguchi et al. The new limitation of the starch succinate being " starch succinate derivative" does not define over the prior art. The starch disclosed in Bell et al is derived from reacting starch with succinate anhydride; thus, it is a starch derivative. Example 1 of the specification discloses reacting the starch with succinic anhydride; thus, it is the treatment as disclosed in Bell et al.

Claims 2-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bell et al in view of Richards et al.

Bell et al do not teaching converting the starch, the water fluidity and the amount of succinic anhydride.

Richards et al teach a method of making lipophilic starch derivative for use at coating material. The process includes the steps of esterification of the starch with n-octenyl succinic anhydride. The amount of anhydride used is generally from about .1-10%. The esterified starch is converted by enzyme treatment to decrease the viscosity of the starch suspension. (see col. 2 lines 60-68, col. 3 lines 30-40)

It would have been obvious to one skilled in the art to convert the starch in the Bell et al process as taught by Richards et al when desiring to obtain a starch suspension having low viscosity. For example, when desiring only a thin film of starch on the food portion instead on thicker layer of a batter, it would have been obvious to have a starch suspension with low viscosity. The amount of water fluidity depends on the viscosity desired and this is a result-effective variable which can readily be determined by one skilled in the art. It would have been obvious to vary the amount of succinic anhydride depending on the degree of cross-linking desired. Since the starch is used for coating, it would have been obvious to one skilled in the art to follow the guide line in the amount used as taught by Richards et al.

Claims 8, 13-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bell et al in view of Wu et al.

Bell et al do not disclose potato product, adding another starch and the processing steps as in claims 14 and 20.

Wu et al disclose a process for coating potato strips. The process includes the steps of blanching the potato, treating the potato in sodium chloride solution, and

coating the potato with starch solution. Wu et al teach adding different type of starch in addition to the main starch component. (see col. 3 and col. 5 lines 63-67)

Bell et al disclose other products can be coated; thus, it would have been obvious to coat potato product when desiring crisp coating on such product. When the food product being coated, it would have been obvious to one skilled in the art to process the potato according to conventional method as disclosed by Wu et al. It would also have been obvious to add another starch to the batter of Bell et al to obtain different flavor, texture, viscosity etc.. Adding combination of starches in coating composition is known as shown by Wu et al. It would have been obvious to one skilled in the art to determine the appropriate amount of cation to obtain the most optimum product. This can readily be determined through routine experimentation. It would have been obvious to add the starch to the blanching water when the food portion is treated in the blanching water because this will save a separate coating step. Blanching the food in the water will cause any component in the water to adhere to the food. It would have been obvious to reconstituting the product by frying or oven heating depending on the texture desired. Frying will give a crispier texture.

Claims 1, 2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shi et al (US2003/0099744).

Shi et al disclose a food composition comprising a food portion and a coating comprising starch succinate that is converted. The starch can be a pregelatinized starch. (see paragraphs 0015, 0017, 0024, 0040)

Shi et al do not disclose the food composition is a fried composition.

It would have been obvious to one skilled in the art to make a fried composition when wanting food having different texture and flavor. Both baking and frying are well known cooking process in the art and the selection of which depends on the fat content, calorie content, taste, texture, flavor etc.. wanted.

In the response filed 7/14/09, applicant argues one of skill in the art will understand the term " starch succinate " refers to succinic acid monoester while the succinate-crosslinked starches of Bell and Mizoguchi are succinic acid diesters. This argument is not persuasive. If there are different forms of starch succinate ester, then the claims need to recite the different form to distinct and differentiate from the form disclosed in the prior art. Patentable weight cannot be given to limitation that is not found in the claims. Applicant has not submitted any evidence to show that the term starch succinate only refers to succinic acid monoester. The limiting of the starch to derivative does not define over the rejection as explained in the rejection above. Applicant refers to the article submitted which recites " succinic annydride reacts with starch to form the half-ester". However, there is nothing in the article that states only the half-ester is known as derivative. The claims are given the broadest interpretation allowable. The derivative claimed is formed by treating starch with succinic anhydride. Bell et al teach the same treatment; thus, they disclose a starch succinate derivative. There is nothing in the claims that differentiates the claimed starch from the starch disclosed in Bell et al. Applicant argues whether a starch will form a half ester or a crosslink depends upon the reaction. While this might be true, it does not affect the determination of patentability of the claims in the instant situation. The claims are not

directed to a method of forming the starch succinate. Thus, the difference in the reaction resulting in different product is not under consideration.

With respect to the 103 rejection of claims 2-6 over Bell in view of Richards and claims 8,13-22 over Bell in view of Wu, applicant makes the same argument with respect to the succinate monoesters. The argument is not persuasive for the same reason set forth above.

With respect to the rejection of claims 1,2 and 7 over the Shi reference, applicant argues that the object of Shi's invention is to provide a glaze that is effective when applied after cooking; thus, there would be no motivation to apply a glaze composition of Shi to a food prior to frying it. The point of applying before frying or after frying is not germane to the issue at hand because the claims rejected are directed to the food product, not a process of making it. Shi teaches to apply the glaze to many different food products including but not limited to pastries, snack, pie, snack products, confectioneries etc... Many of these food products can be fried if a fried texture is wanted. There is no disclosure to conclude that the glaze cannot be applied to food products that have been fried. It would have been obvious to apply to glaze to fried food product to obtain the benefits of the glaze of providing a sheen and surface seal on the fried products. Applicant further argues that Shi discloses that any and all modified starches are suitable for use and one of skill would not find it obvious to select a succinylated starch from amount the vast range. It is not a point whether or not one would select succinylated starch. Shi discloses the succinylated starch as one possible starch in the glaze so Shi discloses embodiment in which the glaze contains

succinylated starch. Applicant's comment about the reduction in fat content is not commensurate in scope with the claims rejected over Shi because none of the claims recites anything about fat reduction.

Applicant's arguments filed 7/14/09 have been fully considered but they are not persuasive.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lien T. Tran whose telephone number is 571-272-1408. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on 571-272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

September 11, 2009

/Lien T Tran/

Primary Examiner, Art Unit 1794